

CLAIMS

What is claimed is:

1. A method for mitigating restenosis at a trauma site within the vasculature comprising:
positioning a catheter adjacent the trauma site; and
delivering a restenosis mitigating drug to the trauma site through the catheter.
2. The method of Claim 1, wherein a stent is located at the trauma site.
3. The method of Claim 2, wherein at least a portion of the catheter is positioned at an interior portion of the stent.
4. The method of Claim 1, wherein the restenosis mitigating drug is insulin.
5. The method of Claim 1, wherein the restenosis mitigating drug is delivered upstream from the trauma site.
6. The method of Claim 1, wherein the restenosis mitigating drug is dispersed to the trauma site through apertures in the catheter.
7. The method of Claim 1, wherein the catheter is a balloon catheter.
8. The method of Claim 7, further comprising disposing the restenosis mitigating drug on a balloon portion of the balloon catheter.
9. The method of Claim 8, wherein the balloon catheter abuts a wall of the vasculature at the trauma site after the balloon catheter is expanded.
10. The method of Claim 9, further comprising transferring the restenosis mitigating drug to the trauma site when the balloon catheter abuts the wall of the vasculature.

11. The method of Claim 9, wherein the restenosis mitigating drug is dispersed to the trauma site through apertures in the balloon catheter.
12. The method of Claim 1, further comprising sensing an analyte with the catheter.
13. The method of Claim 12, wherein the delivery of the restenosis mitigating drug is modified in response to the sensing of the analyte.
14. The method of Claim 11, wherein the analyte is glucose.
15. The method of Claim 1, further comprising adjusting a flow rate of the restenosis mitigating drug.
16. The method of Claim 6, further comprising adjusting a dispersal pattern of the restenosis mitigating drug.
17. The method of Claim 1, wherein the catheter is positioned prior to a stent procedure.
18. The method of Claim 1, wherein the catheter is positioned subsequent to a stent procedure.
19. The method of Claim 1, wherein the restenosis mitigating drug is nitric oxide.
20. The method of Claim 1, wherein the restenosis mitigating drug is an antibody.
21. The method of Claim 1, wherein the restenosis mitigating drug is a steroid.
22. The method of Claim 1, wherein the restenosis mitigating drug is an interleukin.
23. The method of Claim 1, wherein the restenosis mitigating drug is a blood thinner.

24. A system for mitigating restenosis at a trauma site within the vasculature comprising:
a catheter, the catheter being capable of delivering a restenosis mitigating drug;
and
a sensor, the sensor extending through a lumen in the catheter.
25. The system of Claim 24, wherein the restenosis mitigating drug is insulin.
26. The system of Claim 24, wherein the sensor is a glucose sensor.
27. The system of Claim 24, wherein the catheter is disposed in proximity to the trauma site.
28. The system of Claim 24, wherein the catheter comprises infusion apertures.
29. The system of Claim 24, wherein the catheter is a balloon catheter.
30. The system of Claim 24, wherein the catheter comprises an infusion site upstream from the trauma site.
31. The system of Claim 29, wherein the balloon catheter is coated with the restenosis mitigating drug.
32. The system of Claim 30, wherein the sensor is located downstream from the trauma site.
33. The system of Claim 32, wherein a stent is located between the sensor and the infusion site.
34. The system of Claim 33, wherein the sensor extends through the stent.
35. A system for mitigating stent restenosis comprising:
a stent disposed at a trauma site;

a catheter disposed adjacent the stent;
a drug for mitigating the stent restenosis; and
a sensor for monitoring the trauma site, the sensor extending through a lumen in the catheter,

wherein the catheter delivers the drug to the stent.

36. The system of Claim 35, wherein the sensor senses a parameter at the trauma site.

37. The system of Claim 35, wherein the sensor senses an analyte at the trauma site.

38. The system of Claim 37, wherein the analyte is the drug.

39. The system of Claim 36, wherein the parameter is related to the drug.

40. The system of Claim 35, wherein the drug is insulin.

41. The system of Claim 35, wherein sensor is a glucose sensor.

42. The system of Claim 35, wherein the catheter comprises an infusion site upstream from the trauma site.

43. The system of Claim 42, wherein the sensor is located downstream from the trauma site.

44. The system of Claim 43, wherein a stent is disposed between the sensor and the infusion site.

45. The system of Claim 44, wherein the sensor extends through the stent.

46. The system of Claim 35, wherein the catheter comprises apertures.

47. The system of Claim 46, wherein the apertures have a dispersal pattern.

48. The system of Claim 47, wherein the drug is dispersed to the stent through the apertures.